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The
HOUSE
ELECTRICAL



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THE GIFT OF

~~FOR THE~~

GRADUATE SCHOOL OF
BUSINESS ADMINISTRATION

~~Oct 20 12~~

~~Walter M. Stone~~
~~152 Central St.~~
~~Winter Hill, Mass.~~



*Light seeking light doth
light of light beguile* Shakespeare

THE SITE OF THE OLD BOSTON TEA PARTY



The above tablet has been placed by the Sons of the Revolution near the main entrance of the building of Pettingell-Andrews Company, to commemorate the Boston Tea Party, and to mark the spot (then "Griffin's Wharf," but long since filled-in land) where, on that memorable night of December 2, 1773, the liberty-loving men of Boston struck the first blow for freedom.

THE HOUSE ELECTRICAL

Being a Brief Description

of

The Ideal Home
And How To
Plan And Equip It



By
CARROLL WESTALL
Manager of Publicity

PETTINGELL-ANDREWS COMPANY
PEARL ST. ATLANTIC AVE. PURCHASE ST. BOSTON



Received through
Business School.

Eng 4129.12

*To all who would achieve
The Ideal Home
and all that it represents
in greater freedom and happiness
this book is dedicated*

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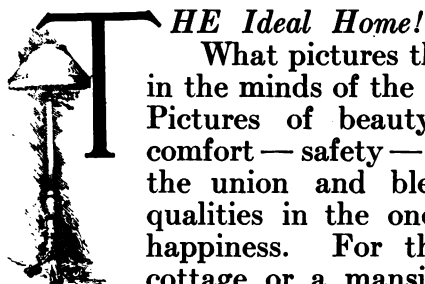
NOTE.—The interior views in this book are from photographs of typical installations, planned, designed, and executed by Pettingell-Andrews Company. Pages ten, eleven, twenty-eight, and thirty-one, present reproductions from photographs taken by no other light save that of the "indirect" fixtures.

The Significance of "The House Electrical."

CHAPTER I.

*"We live in deeds, not years; in thoughts, not breaths;
In feelings, not in figures on a dial."*

BAILEY.



THE Ideal Home!

What pictures the very thought conjures up in the minds of the man and woman of to-day! Pictures of beauty—health—convenience—comfort—safety—true utility. Yes, and of the union and blending of these and other qualities in the one supreme essence we call happiness. For the ideal home may be a cottage or a mansion; but, small or large, it must be dedicated to the principle of providing the greatest possible degree of happiness for life within its walls.

The home! Happiness! How they are linked together in our minds! Happiness,—when considered by itself, a quality ethereal, independent of material things. Yet in this age, when linked with the home, dependent to quite a degree on creature comforts and conveniences—the comforts and conveniences which in many cases owe their very existence to the magic of electricity.

"Magic," we say, for it is the application of electricity to household needs which has revolutionized the modern home. *Just consider:*

The Convenience of "The House Electrical"! The economy of time and of labor made possible by switches and electrical appliances; the abolishing of matches; the satisfying certainty of results.

The Comfort of "The House Electrical"! The saving of steps and of bother; the healthfulness of an atmosphere not exhausted by gas or filled with dust; the

The Significance of

coolness of the electric fan; the eye comfort of adequate light directed where it is needed.

The Economy of "The House Electrical"! The saving of light by switches that quickly turn on and off; the turn-down lamps with their minimum use of current;



RESIDENCE A. F. GOODWIN, COMMONWEALTH AVE., BOSTON

the saving of coal in cooking light meals on electric disc stove, grill, or fireless cooker; the saving of labor by washing machine or vacuum cleaner.

The Satisfaction of "The House Electrical"! The pleasure in the possession of artistic lighting fixtures and beautiful, well-directed light; the joy in a home which runs efficiently, smoothly, and with a minimum expenditure of time and effort.

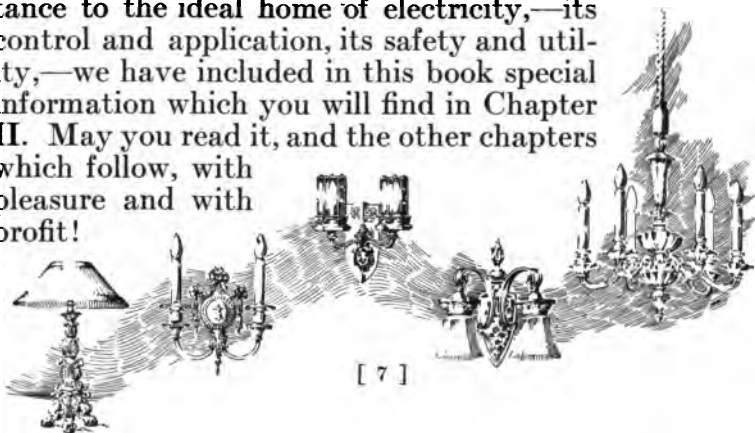
Thus from whatever standpoint we approach the

"The House Electrical"

question, we are brought to realize that the ideal home—the home of our dreams and desires, our hopes and our plans—the home of the present and of the future—has its very foundations in "The House Electrical."

We are a practical people, we Americans. We are not content with merely harboring ideals: we seek to realize them. And so it is that thousands of men and women who live in houses built before the advent or perfection of electric lighting, are now considering taking the first step toward the ideal home. They are investigating the question of wiring their houses for electricity; and they are astonished and gratified to discover how simple and relatively inexpensive a process this has now become. Or, if they are building or planning to build, they are learning from us the importance of determining the location of their lighting fixtures and other "outlets" for electrical appliances, *before* their houses are wired. And all, as they stroll through our Fixture Studios and Electrical Exhibition Rooms, are daily realizing that the electrical equipment of the ideal home is an art, a fine art, needing thought—observation—expert assistance.

To help you to make your habitation the home ideal—"The House Electrical"—is the purpose of this little book. That you may the better appreciate the importance to the ideal home of electricity,—its control and application, its safety and utility,—we have included in this book special information which you will find in Chapter II. May you read it, and the other chapters which follow, with pleasure and with profit!



“Exemplar” Service

in Electrical Merchandise

With Pettingell-Andrews Company the electrical business means not merely to sell but to *serve*.

It means with us a policy based on science—not on guess work; on responsibility—not on indifference; on service—not on mere salesmanship.

It means with us a policy that puts manufacturers' products to the test of a critical engineering department before they are placed in stock; that selects—and sells only the most reliable—the best.

It means with us a policy assuring great buying facilities through carrying enormous stocks; and full information to customers that they may use our merchandise intelligently—economically—and to best advantage.

A policy, in short, founded on the firm belief that our customers' best interests are identical with our own, and inspired by our motto “Exemplar,” which signifies “the height of excellence” in goods and service.




The Spirit of Light and Power in "The House Electrical."

CHAPTER II.

*"Can such things be
Without our special wonder?"*

SHAKESPEARE.



HERE'S no truer thought than the old saw "Wonders never cease." Not only do they never cease, but new and ever newer wonders come crowding on their heels. Only yesterday, we were travelling by sea on sailing vessels. To-day, we but scarcely perfect the limited all-parlor-car train on land, when the mastery of the air—the remaining element unconquered by man—impends. Some of the greatest of these wonders cluster about our homes.

Indeed, the ideal home of the twentieth century is a veritable enchanted palace—full of joys and surprises, of conveniences that double our powers and advantages that treble our satisfaction with life and the good things of life,—and all through the wonder-working of that modern magician, Electricity.

As Shakespeare intimates, we are so surrounded by wonders that we grow to forget them, to take them for granted. Yet once in a while we stop; and catch our breath; and think. In this mood, is there anything that only a few years ago would have been considered more inconceivable—more wildly improbable—than that light, heat, and power could be carried into a house on a small wire, without risk or great expense, and could be made available at the mere pressure of a finger!

Strange, is it not? Yet the process by which this is accomplished is, at bottom, so simple as to be easily

understood. Let us pause, then, before we consider the actual electrical home equipment itself, and, starting at the switch by which we summon power and heat and light from its remote hiding-place, reverse



DU PONT RESTAURANT, BOSTON

the process, and travel in imagination back toward the source of it all. You will find the journey swift, brief, and not uninteresting. And helpful, withal, if it assists you to appreciate the simplicity of these electrical appliances and shows how you can gain the utmost satisfaction from their use.

Starting, then, at the convenient wall plate, whose buttons, pushed, turn the lights on or off, we find behind this plate wires which run through the walls

"The House Electrical"

and flooring of our house, and, joining other wires or branches (which go to other plates, chandeliers, brackets, or "outlets"), converge at the place where the electric current enters the house. Here you will find



VIEW, WILLIAM FILENE'S SONS COMPANY, BOSTON

a U-shaped bar with a handle called a "switch," which is placed there so that the current may be turned off whenever the house is unoccupied. Here also you will find the "meter," which measures the amount of current we use, and near it the "fuses" or "cutouts," which, in somewhat similar fashion to the safety-valve on a steam boiler, shut "off" automatically all surplus current beyond the amount which the wires of the house are planned to carry. (Where

it is desired to install in the house larger wires, so that special appliances like large vacuum cleaners or electric radiators, which require increased current, may be used, the fuses as well as the wires are of corresponding capacity.)



SWITCH

Note also how no precaution is omitted to assure your safety and fair treatment. The little wires in the house are not "bare," but encased with rubber and other materials called "insulation," which prevent the escape of the current from the wires. The materials and construction of fuses and switch must also conform to rigid rules enforced by penalties.



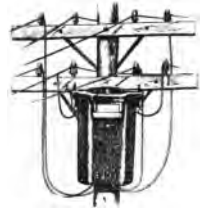
HOUSE WIRE



METER

The result is that of all the causes contributing to our country's enormous fire losses, electricity is answerable for less than one per cent.—needless to say by far the lowest of any single cause. Even the meters are carefully tested for accuracy, so that your charges for electric current may be always fair and reasonable for the amount used.

Following the wires out of the house, we find them strung on poles, and later passing through a large iron box called a "transformer," which reduces the high pressure of current as created at its source, the power house, to the lower pressure suitable for the house. From the transformer the wires continue to the power house, where huge machines create the power from which the current is generated.



TRANSFORMER

And we might go still further, and trace the creative force—back through the turbine or gas engine, back through the coal barge or stream—to its first source,

"The House Electrical"

locked up in nature's vast storehouses of mine or waterfall; but it is enough! Nature guards her secrets jealously. We cannot yet fathom what electricity actually *is*; we have but barely developed the methods and machinery by which it may be harnessed and directed.

Simple story? So we told you at the outset. Yet the achievement of this simplicity—this "dependableness" and safety—has involved the profound study of hundreds of inventors, the incessant toil of thousands of skilled workmen, and the permanent investment of many millions of capital; and all that at the pressure of a baby's finger, these modern genii of power and heat and light—these mighty slaves of the electric lamp—may be summoned to do your bidding.



POWER HOUSE



“Exemplar” Service

in Lighting Fixtures

With Pettingell-Andrews Company the lighting fixture business has finally resulted in the wedding of science and art.

Science—as demonstrated by an illuminating engineering department whose standards are “Economy!” “Efficiency!”

Art—as expressed to the full by a designing department whose ideals are “Beauty” and “Quality.”

And the blending of both in a picked selling organization whose watchwords are “Suitability” and “Utility”; and in a service that assures these invaluable advantages to every customer, large or small.

A business which with us is professional in its standards and service, and commercial only in its accuracy and despatch; which is dominated by an ideal of beauty and seeks ever to transplant that beauty into the homes of its customers; a business which provides a service that can no more be measured by mere dollars than can its guiding spirit—“Exemplar”—“the height of excellence.”



Some Alluring Glimpses into
"The House Electrical."

CHAPTER III.

*"Ever charming, ever new,
When will the prospect tire the view?"*

DYER.



WE HAVE always believed variety to be the true spice of life. For even after admitting that this proverb is subject to some qualification, the fact still remains that nothing is more destructive of happiness than an existence of dull and drab monotony.

With this statement no woman will disagree. And even the men are coming more and more to realize their responsibility to assure an environment in which their wives and families will find interest, charm, and reasonable variety.

This the twentieth century home provides. Consider it in comparison with the houses of only a decade or two ago. In former days a man, exhausted by a busy day in the office, came home to find his wife exhausted by an equally busy day under surroundings of far less variety than his. The husband was naturally indisposed to venture forth in the evening: his wife required just this change to refresh her for the following day.

In the ideal home of the present the woman is *not* exhausted. Modern electrical appliances save trouble, steps, and labor for her and for her servants—make it easier to plan, to direct, and to accomplish—leave her time during the day for shopping, theatre, or social duties.

So sure are we that "The House Electrical" is the solution of some of your home-making problems, that we

Alluring Glimpses into

want to have you share for a while *our* house electrical—to wander through its rooms—examine its many charming features—and enjoy them all for the time as if they were already yours. Come, then!

Look, as we turn the corner! See there—just ahead of us? *That's* the house, inviting in its beautiful



VIEW, RESIDENCE A. F. GOODWIN, COMMONWEALTH AVE., BOSTON

landscape setting and general architectural perfection. It is quite evident we are expected, for, approaching the door, there is a slight click, and at once the entrance is flooded with a soft radiance. And how pleasing and well chosen is the source of this light—a lantern admirably according with the architecture of the exterior!

"The House Electrical"

As the maid opens wide the door, we, entering, note by its side a switch plate with two buttons; the upper, commanding that welcome glow to visiting friends just experienced by us; the lower, connecting with ceiling fixtures, or, operated by the opening of the door at dead of night, creating fear in the heart of the crimi-



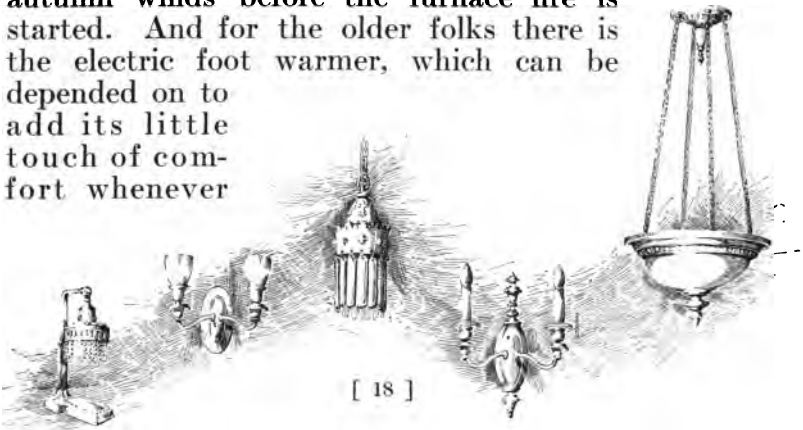
VIEW, RESIDENCE A. F. GOODWIN, COMMONWEALTH AVE., BOSTON

nal intruder. Also, down there in the baseboard, so inconspicuous as almost to pass unnoticed, a "floor receptacle" for that beautiful floor standard or lamp which we rarely arrange for, but usually buy sooner or later, or for the connection of stationary or portable vacuum cleaner with its labor-saving attachment for polishing hardwood floors. It is pleasant also to

learn that both of these electric servants, as well as other electrical appliances of the ideal home, can be transferred at will from one room to another, and connected to the outlets as easily and simply as the attaching of an electric bulb to a socket.

We are received by the hostess in the Reception or Music Room—a room distinguished by the presence of a crystal chandelier, which, with its glowing, changing colors, seems the central note in the decorative harmony of this exquisitely furnished and well-lighted apartment. So well does it light the space about it that no other fixture is needed save the subdued yet rich piano lamp, located on the piano in the position that serves both singer and accompanist to best advantage.

The transition from the Reception Room to the Living Room is that embodied in the change from luxury to home comfort. Chandelier and brackets of harmonious design provide general illumination. An artistically leaded reading lamp, connected to a convenient floor "receptacle," casts a warm glow throughout the entire room—a warmth in appearance only, of course,—to which is added a warmth in fact, when the electric radiator is turned on during the first chill autumn winds before the furnace fire is started. And for the older folks there is the electric foot warmer, which can be depended on to add its little touch of comfort whenever



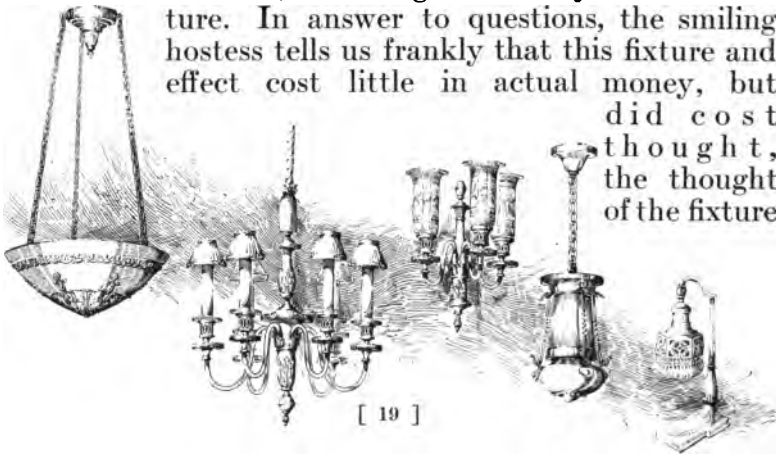
"The House Electrical"

needed. Comforting also is the thought that in the coldest days of winter the electric fan proves its all-the-year value by aiding in the circulation of heated air from register or radiator. Another delightful touch, this time suggestive of the old Colonial days, is afforded by the old-fashioned candlesticks on the mantel—candlesticks that once lay idle in the attic, but now altered for electric light and capped by tiny flame bulbs, which give the flickering candle-light effect. These candlesticks are "connected up" through mantel receptacles. We also observe the presence of another floor receptacle for a second table lamp during the long, cold, stormy evenings which the entire family are wont to spend in reading or in gathering around the electric chafing dish and corn popper.

About to leave the Living Room for the Library, we catch through the window a glimpse of what at first appears to be a metal bowl, from which hangs a soft, green, twining vine. At a touch of our hostess's finger to a near-by button, this bowl is revealed as an inverted type fixture, reflecting light to the ceiling and then downward; and scarcely has the chorus of delighted exclamations died away before we are all on the side veranda, admiring this truly outdoor fix-

ture. In answer to questions, the smiling hostess tells us frankly that this fixture and effect cost little in actual money, but

did cost
thought,
the thought
of the fixture



house to which she referred her lighting problems. As we glance about us, we note in the baseboard a receptacle—"for the reading lamp on sultry summer nights, when we are driven from the stuffy house, and wish to finish that final exciting chapter in the latest novel," our hostess obligingly explains. And—fascinating thought—this same receptacle can be used to connect with various electrical cooking apparatus, so that breakfast, luncheon, or even a light dinner may be served *al fresco* on the veranda, which is enclosed with glass in winter and screened in summer.

Chatting over these enticing aids to hospitality, we next find ourselves in the Library. Here a fixture of inverted bowl type throws powerful rays of light to the ceiling, from which they are reflected downward without glare or shadows in a soft, all-pervading glow that soothes tired eyes, enabling one to read for hours at a stretch without the fatigue or headaches which we now assign to other causes, but which in reality are due to eye strain.

From the Library it is but a step to the Dining Room, where another fixture of the indirect type is suspended by a handsomely designed pendant from a central outlet. This fixture, however, differs from the other in that it consists of an imported Alabaster bowl. And this translucent bowl sends only part of the light directly upward, the remainder filtering directly through the Alabaster in nature's softest tints, against which



"The House Electrical"

on its exterior appears in relief the exquisite carving of an Italian master craftsman.

The glow from this bowl brings out all the charming details of etched or engraved side brackets finished in



STUDIO ROOM SHOWING FRENCH AND GOLD EFFECTS

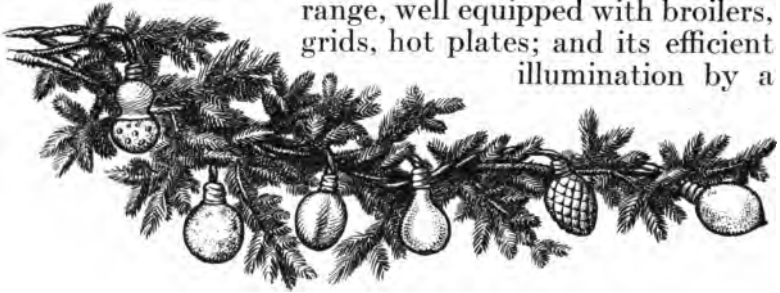
silver, blending delightfully with the cut glass and silverware. One of the ladies declares that beauty of setting, while much appreciated by every woman, is not so important a matter as the question of breakage—that if some one would only solve *that* question—

The words are scarcely out of her mouth before our "guide" again surprises us by stepping to the built-in china closet, and opening one of the doors, when presto! the entire interior is illuminated as if

at mid-day. "And you have no idea how many times the cost of the little switch which does this has been paid for in the saving of my nice china from breakage as it is put away," she adds.

This leads to a discussion of the servant problem, whereupon we are ushered into the service part of the house; first, however, having our attention called to the dining room wall outlet for electric fan, the floor receptacle for chafing dish and other appliances, and the convenient button for service calls. In the kitchen, where appearance is of course not of first importance, wall outlets of several different types have been freely installed. To these can be connected up cooking devices in a way that assures neatness, celerity, and satisfied and efficient servants. "Where I used to have a cook and a second cook, I now obtain better food and quicker service with only one, and she gets out of the kitchen almost an hour earlier than under the old conditions. Servant problem? Why, bless you, I haven't any, and I am besieged by good, capable girls employed by others, who are eager to work under the conditions prevailing in my home."

And who wouldn't? is the silent opinion of the party—with every device for saving steps, lightening labor, and securing a certainty of results. The immediate and uniform heat, always under control, of the electric range, well equipped with broilers, grids, hot plates; and its efficient illumination by a



“The House Electrical”

ceiling fixture so located as to light the entire interior of the oven.

The spacious pantry with a broad shelf filled with electric cooking devices—toaster, disc stove, grill, and others—and equipped also with electric egg beater, cream whipper, coffee and meat grinders, dough mixer, silver polisher. The sink with its instantaneous water heater; and hard-by a little motor for sharpening, buffing, or for running any small power appliances.

Even the refrigerator has its interior lamps, operated by door or cover; while over all a center light of more than ordinary brilliance, turned on and off by a little chain, lends an air of cheerfulness to the scene.

Passing into the laundry, we discover that at last the terrors of “Blue Monday” are no more. A washing machine, wringer, dryer, and ironer, all electrical, with strong, steady light from overhead fixtures, produce the results formerly achieved only by hours of the hardest kind of toil.

Insisting that we inspect also the second floor, our hostess shows us first the bathroom, where a special shaving fixture, well located over the mirror, makes shaving a pleasure by illuminating distinctly every part of the face. Outlets, conveniently located, also permit use of electric shaving mug, massage vibrator, hair dryer, or curling iron—not to mention the comfort of the electric radiator on cold mornings.

The bedrooms are each equipped with reading light directly over the heads of the beds, while receptacles in the baseboards permit the connection of reading lamps to rest on near-by tables. A dainty feminine touch is added to the dresser lights by silk shades fashioned of materials in keeping with the furnishings of the room, by the mistress or her household in odd moments. Outlets are also provided for electric fans, which do so much to make the hot nights bearable.

Alluring Glimpses into "The House Electrical"

The Nursery of "The House Electrical" we agree to be a room of true comfort for the little ones, with an equipment that includes several wall outlets for the attachment of baby's milk warmer, heating pad radiator, fan, and, of course, ample lighting arrangements.

In the Sewing Room, sewing machines with motor attachments make sewing merely a case of guiding the cloth; while a single bracket over the machine provides all the light necessary, and serves in addition as an outlet for the motor, as well as for that great convenience, the electric pressing iron.

"Are the men of the house as well provided for?" asks a young matron of the party, and, as if in answer, we find ourselves in the Den. Over the head of the couch a good reading light; upon the table an attractive reading lamp; upon another table a small fan. Yes, the men seem well provided for!

During a lull in the conversation, the brisk steps of the servants in the kitchen below us, completing their day's labors, serve as a reminder that we have already made a lengthy call—with much in the house that must wait for another visit. But before bidding our hostess farewell, we take time to glance into one or two of the large, roomy closets in which the house abounds, and which have brilliant lights operating and extinguished automatically by the mere opening and closing of the doors; to learn from her that the cellar and attic are equally well lighted by hand lamps, with wire protecting guards, on long cords; to peep into the garage with its electric tire pump and portable buffing motor and hand lamps, and into the stable with its electric groomer and clipper.

With final grateful adieus to our hostess, we reluctantly take leave, and wend our way to our several homes, carrying with us many a mental picture of "The House Electrical"—its convenience, its comfort, and its charm.

A PARTIAL LIST

OF INSTALLATIONS PLANNED, DESIGNED, AND INSTALLED

BY PETTINGELL-ANDREWS CO.

RESIDENCES:	A. F. Goodwin	Commonwealth Ave., Boston.
	John Q. A. Whittemore	Buzzards Bay, Mass.
	E. E. Wellington	Commonwealth Ave., Boston.
	Mrs. J. Sloat Fassett	East Gloucester, Mass.
	Robert Cluett	Troy, N.Y.
	Chas. E. Gibson	West Newton, Mass.
	I. A. Ratchesky	Commonwealth Ave., Boston.
	General Anson Mills	Gloucester, Mass.
	Guy P. Gannett	Augusta, Me.
	Winchester Bennett	New Haven, Conn.
	Grant Walker	Weston, Mass.
HOTELS,	Hotel Copley Plaza	Boston.
APARTMENTS,	Hotel Georgian	Boston.
RESTAURANTS:	Du Pont Restaurant	Boston.
	Gloucester Apartments	Boston.
	Webber Apartments	Brookline, Mass.
LIBRARIES:	John Hay Library	Brown University, Providence.
	Radcliffe Library	Radcliffe College, Cambridge.
	Shedd Memorial Library	Alstead, N.H.
	Whitinsville Library	Whitinsville, Mass.
	Bixby Memorial Library	Vergennes, Vt.
	Leominster Library	Leominster, Mass.
COLLEGE BUILDINGS:	Administration Building	Dartmouth, Hanover, N.H.
	Gamma Chap. Corp. Psi Upsilon,	
	Amherst College	Amherst, Mass.
	Smith College (3 buildings)	Northampton, Mass.
	Administration Bldg. Wm. Rice	
	Institute	Houston, Tex.
MUNICIPAL BUILDINGS:	Municipal Buildings	New Bedford, Mass.
	City Hall	Montpelier, Vt.
	Kennebec County Court House,	Augusta, Me.
STORES:	Wm. Filene's Sons Co.	Boston.
	Ginter Grocery Co.	Boston.
	Liggett Drug Co.	Boston.





THE SOURCE OF THE
IDEAS FOR BEST



"HOUSE ELECTRICAL"
FIXTURES & DEVICES

The "Inspiration" of "The House Electrical."

CHAPTER IV.

*"Experience is by industry achieved,
And perfected by the course of time."*

BACON.

IMITATION is the sincerest flattery," some bright person once stated. And who can deny that our manners and our customs—we had almost said our thoughts, have had their origin in other times and with other peoples, to whom we daily render the unconscious flattery of imitation!



Have you never wandered reverently through the ancient yet still magnificent ducal palaces of Florence, Venice, Verona? What is the secret of their power over us?

Is it not the unconscious tribute that we all pay to the vast study, time, skill, pains, which went without stint into their planning and production? Surely the owners of these palaces must have deeply respected the superior knowledge of those who, inspired by the classic beauty of the age which preceded them, struggled—and not in vain—to embody that beauty in the art and architecture of their time.

From the palaces of long ago to the home of



No. 1, North Station. No. 2, Filene Building
"So easy to reach"

PETTINGELL-ANDREWS COMPANY
PEARL STREET, CORNER ATLANTIC AVENUE

Three minutes from South Station; five minutes by Summer Street car from Filene Building; eight minutes by Elevated Train from North Station.

The "Inspiration" of

to-day is indeed a long step, yet in both the same principles obtain. The modern home builder, if he would profit by the experience of the past, must likewise put his case in the hands of those who know—the architect who has made a profound study of home building in every age and clime; and working with him according to his plans, and supplementing his general training with their intensive knowledge and experience, the interior decorator, and the lighting fixture specialist.

Lest you think we are inclined to harp on the importance of these preliminaries, or to magnify, for instance, the value of this expert assistance from the fixture house, it may be well to bear in mind that hundreds of dollars—thousands, if time, convenience,



CORNER OF TEA ROOM, HOTEL COPLEY PLAZA, BOSTON

"The House Electrical"

and labor are worth anything—can be saved by properly planning the wiring of houses for electricity.

How shall you find the lighting specialist, in fact, as well as in name? Ask your architect: he knows. Ask him who installed the fixtures in that beautiful hotel waiting-room you so much admire. Ask him who planned the illumination for that splendid new church just completed, or who remodelled so effectively yet inexpensively the lighting system in that older house which friends of yours recently bought and renovated. Then choose the fixture house which most frequently figures in these answers, and you cannot go far astray.

And if the fixture house which gets "first mention" is Pettingell-Andrews Company—and their volume of business would seem to indicate that this happens quite frequently—your natural desire to gain first hand information as to their standing will perhaps lead you to ask some of the questions which deserve answer here.

First, then, have we had sufficient experience? And the answer is "ample"—since the founding of our firm dates back many years—to the days when many town houses were only just changing from oil lamps to gas for lighting—to the days when the names of all the telephone subscribers in Boston were easily



EUCLID AVE. PRESBYTERIAN CHURCH,
CLEVELAND

The "Inspiration" of

contained on a single card—to the early beginnings of the electrical industry itself.

Small indeed was the business of the company in those days—but not for long. For once the early experimental stage in the application of electricity to modern needs had been passed, the rapidly increasing demand for improved electrical equipment re-



STUDIO ROOM SUGGESTIVE OF ENGLISH ARCHITECTURE

sulted in a rapid expansion of our business, that compelled six different relocations in the need for larger space before we reached our present quarters,—“On the site of the old Boston Tea Party.”

To-day a firm of national standing, the Pettingell-Andrews Company, occupies two large buildings, fronts

“The House Electrical”

on three streets, has a highly-systematized organization of 200 persons, well-equipped Designing and Engineering departments, and the most extensive Lighting Fixture Studios and Electrical Appliance Exhibition Rooms in the entire country.

“But isn’t your location a bit out of the way?”
As compared to the retail shopping district perhaps it



VIEW, WM. FILENE'S SONS COMPANY, BOSTON

is. Our site is made necessary by reason of the enormous space required for our display and stock rooms, which, if located in the retail district, would obviously compel us to mark our goods at much higher figures than they now bear.

Actually, however, our location seems “out of the

The "Inspiration" of

way" merely because it is in a part of the town unfamiliar to many people. But when you consider that we are situated within three minutes' easy walking distance of the South Station; that our establishment is passed by a line of cars which run from the East Boston Ferries and Rowe's Wharf, up Summer Street,



BALL ROOM, HOTEL COPLEY PLAZA, BOSTON

Washington, Boylston, and around the corner of Hotel Touraine into Tremont Street, transferring there through the Boylston Street subway station to cars for Back Bay, Brookline, and the Newtons,—you will agree with us that we are quite accessible.

"What is the best time to visit these Fixture Studios and Electrical Exhibition Rooms?" At any time. Let's

“The House Electrical”

suppose you have consulted the little map in this book, and are even now at our main entrance, where Pearl Street unites with Atlantic Avenue. As you enter, at your left are the executive offices of the company and the Purchasing Department, before you the broad Colonial staircase which leads to the Fixture Studios, to the right the Sales Department, while directly ahead stretches for more than a hundred feet a vast room filled with every imaginable electrical device for the home ideal—stoves, toasters, irons, chafing dishes, washing and ironing machines, vacuum cleaners, and many another, which skilled clerks are prepared to demonstrate, and to offer you helpful suggestions to assure economical and efficient operation.

Leisurely ascending the Colonial staircase, you enter another door—and are straightway transported to fairyland. For here is room after room, exquisitely furnished, fitted, and filled with lighting fixtures that baffle description. One moment you are in a room of Flemish oak, inspecting fixtures suggestive of English architecture; next admiring the dainty French and gold effects of a room paneled in Circassian walnut, or soothed by the soft glowing outlines of a hand-carved, imported alabaster fixture; while the adjoining doorway reveals delightful glimpses of a room containing chaste Colonial designs. You will likely be impressed by the fact that these fixtures are all original and



exclusive designs—the product of designers thoroughly conversant with classic and modern art—nor will you overlook the many reading and desk lamps of pleasing yet practical design. And, further on, another room—

“Don’t stop!” you say? Ah, but what else *can* we do? We cannot do justice in mere words to what awaits you here—why try? Far better, both for you and for us, that you form your conclusions as to the character of our goods and service—not from the very imperfect and inadequate story in this book, but from what you will see with your own eyes during a trip to “the site of the old Boston Tea Party.”

May we be permitted to hope that you will so honor us in the near future?

SOME ADDITIONAL INSTALLATIONS

BY PETTINGELL-ANDREWS CO.

BANKS:	Old Colony Trust Co.	Boston.
	Commonwealth Trust Co. . . .	Boston.
	Nat. Shawmut Bank (Partial) . .	Boston.
	Fourth National Bank	Boston.
	Mechanics' Savings Bank	Worcester, Mass.
	Mechanics' Bank	New Haven, Conn.
	Naumkeag Trust Co.	Salem, Mass.
	Merchants' National Bank . . .	Salem, Mass.
	Federal Trust Co.	Boston.
ROMAN CATHOLIC CHURCHES:	Gardner Savings Bank	Gardner, Mass.
	St. Joseph's Church	Newport, R.I.
	St. Patrick's Church	Brockton, Mass.
	St. Philip's Church	Boston.
	Church of Our Lady of the Assumption	East Boston.
	St. Mary's Church	Bangor, Me.
	St. Patrick's Church	Cambridge, Mass.
	St. Clement's Church	Somerville, Mass.
	St. William's Church	Dorchester, Mass.
	St. Benedict's Church	Somerville, Mass.
	St. Margaret's Church	Lowell, Mass.
	St. Agnes' Church	Plymouth, N.H.
	St. Francis de Sales' Church . .	Bennington, Vt.
	Church of the Sacred Heart . .	Portland, Me.

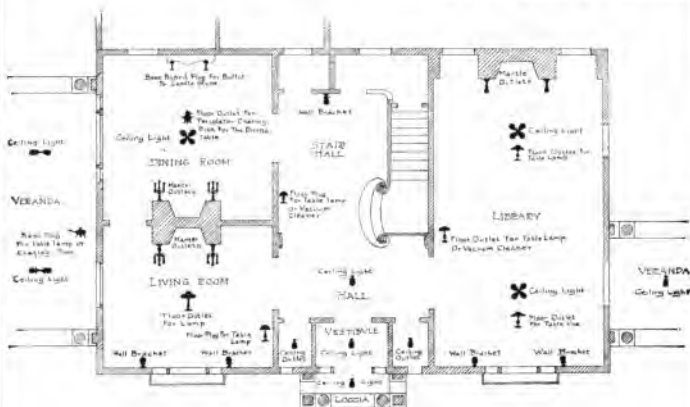
"The House Electrical"

PETTINGELL-ANDREWS CO. INSTALLATIONS—CONTINUED

SOCIETIES AND ASSOCIATIONS:	Ben. & Pro. Order Elks . . .	Boston.
	Masonic Lodge Building . . .	Rockland, Me.
	Masonic Building	Everett, Mass.
	Young Men's Christian Asso- ciation	Cambridge, Mass.
	Ben. & Pro. Order Elks . . .	Fall River, Mass.
	Young Men's Christian Asso- ciation	Malden, Mass.
	Odd Fellows Building	Malden, Mass.
HOSPITALS:	Nurses' Home, City Hospital .	Augusta, Me.
	Homœopathic Hospital . . .	Yonkers, N.Y.
	Rice Pavilion, Quincy Hospital.	Quincy, Mass.
	State Colony for Insane . . .	East Gardner, Mass.
	Memorial Hospital	North Conway, N.H.
	Maine Insane Hospital	Augusta, Me.
OFFICE BUILDINGS:	Christian Science Pub. Co. . .	Boston.
	Minot Building	Boston.
	Mills Building	El Paso, Tex.
	Suffolk Real Estate & Tr. Bldg.	Boston.
	Offices, Parkinson & Burr . . .	Boston.
	Bangor Ry. & Elec. Co. . . .	Bangor, Me.
	E. R. Thomas Motor Car Co. .	Boylston St., Boston.
	United Illuminating Co. . . .	Bridgeport, Conn.
	United Illuminating Co. . . .	New Haven, Conn.
	United Electric Light Co. . . .	Springfield, Mass.
	Rochester City Building . . .	Rochester, N.H.
PROTESTANT CHURCHES:	Euclid Ave. Presbyterian Ch. .	Cleveland, Ohio.
	First Parish Congregational Ch.	Wakefield, Mass.
	First Congregational Church .	Reading, Mass.
	First Congregational Church .	Hyde Park, Mass.
SCHOOLS:	Beverly High School	Beverly, Mass.
	New Bedford Commercial and Classical School	New Bedford, Mass.
	Newton Technical High School,	Newton, Mass.
	Middlesex School for Boys . .	Concord, Mass.
	Dana Hall School	Grove St., Wellesley, Mass.
	Franklin Union	Berkeley St., Boston.
	School for St. Mary's Parish .	Melrose, Mass.
FACTORIES AND MILLS:	Cheney Bros., Admn. Bldg. . .	So. Manchester, Conn.
	Thos. G. Plant Co.	Center & Bickford Sts., Boston.
	New Bedford Cotton Mill Corp.	New Bedford, Mass.
	Warren Cotton Mills	West Warren, Mass.



Below: typical first floor plan of "The House Electrical," indicating location of every outlet and the electrical equipment for which it is intended




Your Home "The House Electrical."

CHAPTER V.

*"Of all sad words of tongue or pen,
The saddest are these: 'It might have been!'"*

WHITTIER.

 **W**ELL, WELL! *That's* a mighty cheerful quotation for the beginning of a chapter!" you say? You're right; we don't deny it. We would greatly have preferred some other one. But our plain duty would not permit us.

You see, it's that impulsive person whose enthusiastic desire for the immediate possession of "*The House Electrical*," leads him to disregard all preliminaries. *Forgetting* that the charm of a home—its power of expressing the individuality of its owner—is little or great in proportion to his personal identification with the important details of its construction and decoration.

Evidently this impulsive person is far more numerous than *we* had realized. And that is why we simply cannot resist the opportunity to "point a moral and adorn a tale" at his expense, for the benefit of you who would profit by his mistakes. Our responsibility to present and future customers demands this of us.

"Of what has this unfortunate man been guilty?" you ask. And swift the answer comes: guilty of the high crimes of impatience, thoughtlessness, lack of investigation, failure to look ahead!

He was one who long had cherished the hope of one day building and owning "the ideal home." With him the idea was a cloud by day and a pillar of fire by night. Yet, feeling that it was but a vain desire, he allowed it to remain a mere ideal—formless, indefinite in outline, wanting shape and substance.

One day the impossible came to pass (as it often does). His ship came in. It was now both possible and practicable to indulge his long-cherished hopes. Without preliminaries, without investigation, without any well-defined plan at all, he bought a piece of land, made a rough estimate of cost, put the plans out on competition, gave the job to the builder who was the lowest bidder, and plunged head-foremost into house building. Consult an architect? Not much; he knew a thing or two; he intended to save the fee and put it into the house!

Came the builder to him with "Mr. Jones, how shall we plan this window or that fireplace?" Came carpenter, plasterer, plumber, hardware man, each with his questions, till the poor man, complaining that he could not give up business and "camp on the job," in desperation referred them all, save the electrical contractor, to the builder as final arbiter.

At last came the electrical contractor with "Mr. Jones, I simply cannot wait any longer; you *must* select your lighting fixtures at once." At this point Jones came to us. We asked to see his plans, that we might lay out, without expense to him, a wiring diagram that would give the best results. It developed that his house was *already* wired and the outlets all in place. We asked him, incredulously, if it had *never* occurred to him that the location of his outlets might not have *some* bearing on the selection of his fixtures and electrical appliances. No, it seemed that it never had!



“The House Electrical”

And so, once more, we were forced to stand aside and see a beautiful home shorn of all artistic merit and much of its convenience, because the outlets for fixtures and electrical appliances were either wanting, or



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located without the slightest consideration for what would be placed on them.

Oh the pity of it! A home builder comes to us full of hope and confidence, to select, in short order, beautiful metal structures to adorn as well as light his home. And then after hours, yes, days, of eager search amid the tempting display of fixtures in our studios, disappointed, desperately weary, he makes a belated selection—not of the designs he wants, not of the designs

he should have, but of those which he is forced to take because the location of the outlets permits no other choice.

That is the story. Tell us—were we not justified in



RESIDENCE CHAS. E. GIBSON, WEST NEWTON, MASS.

our selection of the quotation at the head of this chapter? And is not the moral worth reiteration? Permit us, then, to emphasize it even more forcibly: *Do not under any consideration permit your house to be wired and plastered before you have made a preliminary selection of lighting fixtures and electrical appliances.*

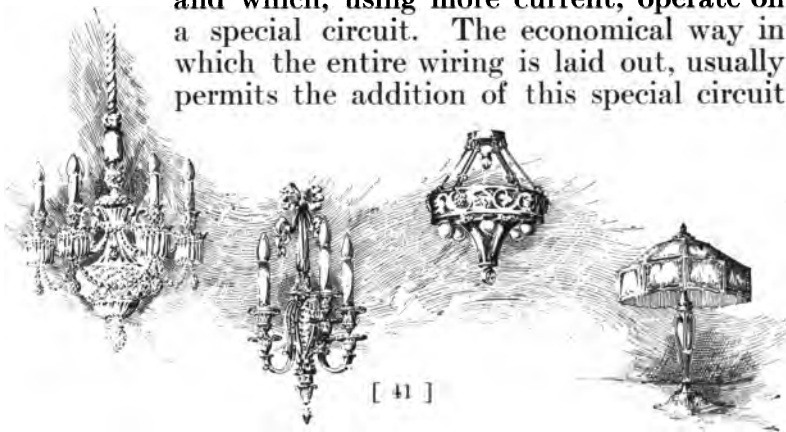
First bring your plans to us. We will talk the matter over with you in a general way. Then, if you will send us a set of blue-prints, giving divisions of various

"The House Electrical"

rooms, dimensions, floor space, color of woodwork and any personal ideas you would like to have carried out, we can give you intelligent, valuable, expert advice.

This is the way that we will work: We turn your blue-prints over first to our Electrical Engineering Department and then to our Illuminating Engineering Department (both features of our service exclusive with this organization). These two departments lay out the wiring and outlets in accordance with the latest scientific data, on the basis that provides the most economical installation,—the utmost possible for the amount you have allotted for wiring and fixtures. This wiring is so skilfully and far-sightedly planned as not only to serve best your present wants, *but to permit of gradual expansion at the minimum cost.* Thus there is made possible later, the installation of additional outlets, if desired, at a reasonable expense—an expense that would be practically prohibitive, were not the *first* installation planned with this in view.

The Electrical Engineering Department indicates a reasonable number of outlets for electrical appliances, including those which you are likely to want at once. It provides for those which operate on the ordinary lighting circuit, and those which may later be secured, and which, using more current, operate on a special circuit. The economical way in which the entire wiring is laid out, usually permits the addition of this special circuit



Making Your Home

practically within the original allowance. You may not think, at the outset, you will require this circuit; but since it can be installed at the time at little increased cost, and cannot be added after the house is



STUDIO ROOM SHOWING SIMPLE COLONIAL FIXTURES

plastered, except at a largely increased wiring expense, we usually advise its inclusion.

The Illuminating Engineering Department then plans the fixture outlets, locating them where the least amount of current will give the most light, and specifying size and type of lamp and shades to provide the exact amount of candle power to light each room properly without the waste of current so common to most homes.

Then your blue-prints are turned over to our Fix-

"The House Electrical"

ture Designing Department, which adds to the scientific data of the other departments the necessary artistic touch. Sketches are prepared and submitted—sketches of fixtures so in harmony with your general architec-



CHURCH OF MARY IMMACULATE OF LOURDES, NEWTON, MASS.

tural scheme as to become a component part of the room—and not, as frequently happens, a mere makeshift stuck against wall or ceiling as if in after-thought.

At this stage, we have usually accumulated all the information needed for the complete electrical equipment of "the ideal home"—including wiring diagram, list of suggestions for electrical appliances, and lighting fixture plans; and this report, returned to you or to

Making Your Home "The House Electrical"

your architect, comprises a finished scheme, correct mechanically and artistically—ready to turn over to your electrical contractor—for it is the contractor who does the actual wiring itself.

This service, moreover, is entirely without charge. It does not place you under the slightest obligation to purchase your electrical equipment from this company. It is both your right and privilege to compare our work with that of others. And in this way, you are likely to discover some of the reasons why we have become the largest electrical house in the entire country.

Certainly it will be a pleasure to serve you at any time. The resources of our entire organization are always at your disposal. We await your call.

EXPLANATORY NOTE.

An understanding of how electricity is sold will help in answering the question, "Can I afford to use electrical appliances?" Electricity is ordinarily sold by what is known as the Kilowatt-hour. This is based on the "watt," the standard unit of electrical measure. The charge for light is based on the kilowatt-hour (1000 watts).

For instance, a popular size of Mazda lamp for residence use gives about 20 candle power (the rough equivalent of 20 candles burning at once). This means that, taking the same average lighting rate of ten cents a kilowatt, a twenty-five watt lamp would burn 40 hours for ten cents or four hours for one cent.

The table on the opposite page will be found of interest as indicating the average operating cost for some of the electrical appliances in most common use.



WHAT A CENT'S WORTH OF POWER WILL DO.*

It will burn *for one hour two* 50-watt * (formerly "rated" as 16 candle power) carbon lamps, or *four* 25-watt (20 candle power) Mazda lamps, or *five* 20-watt (16 candle power) Mazda lamps.

It will bring to a boil two quarts of water.

It will run the electric broiler for six minutes.

It will operate a twelve-inch fan for ninety minutes.

It will operate an electric griddle for eight minutes.

It will operate a luminous radiator for eight minutes.

It will make a Welsh rarebit in an electric chafing dish.

It will operate a sewing machine motor for three hours.

It will keep an eight-inch disc stove hot for seven minutes, or long enough to cook a steak.

It will operate a seven-inch frying pan for twelve minutes.

It will make four cups of coffee in an electric coffee percolator.

It will keep a foot-warmer hot for a quarter of an hour.

It will keep a six-pound electric flatiron hot for fifteen minutes.

It will heat an electric curling iron once a day for two weeks.

*As the charges of different lighting companies for current naturally vary somewhat, in accordance with the varying costs of coal and labor in different localities, the basis selected for the above figures is the average lighting rate of ten cents per kilowatt. Those whose lighting charges are more or less than this basis can easily determine the proportionate figures, which in either case will not vary greatly from those above. Of course it should be borne in mind that many lighting companies make a special, lower "power" rate for current used to operate electrical appliances which require a special circuit.





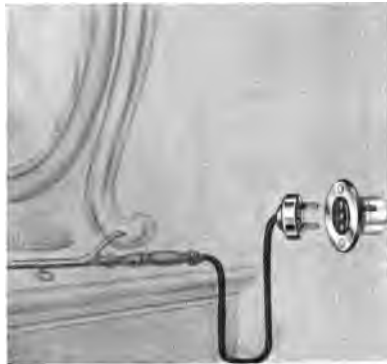
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5406



5565



5506



1108



5418

WIRING DEVICES (SEE OPPOSITE PAGE)

381 Combination Heating Receptacle
 5565 Polarized Flush Receptacle
 1108 Chapman Receptacle

5406 Separable Attachment Plug
 5506 Round Plate Flush Receptacle
 5418 Flush Receptacle without Lift Cover

A FINAL WORD.

This page is primarily for the benefit of those of our readers who are unfamiliar with the terms "outlet" and "receptacle," and so to help them in an understanding of this book.

An "outlet" is merely an aperture in floor, wall, or ceiling, out of which are carried wires for connection with lighting fixtures or electrical appliances.

Some of the more important "receptacles" are illustrated on the opposite page. In order to show these, both as they appear on the counter of your dealer and in actual use in the home, they are portrayed in their proper surroundings as if photographed by "X-ray."

Examining them, you will readily note that a receptacle is in fact a recess in baseboard, floor, or wall, into which the base of an incandescent lamp, or the plug end of the cord from an electrical appliance, can be inserted for connection with the house wires.

But why will not the socket of a lighting fixture serve the same purpose? you may ask. It will. The advantage of the receptacle is merely in the greater convenience of its location, and the greater ease of attachment to it—by its use abolishing, in the case of the fixture, the necessity of removing electric lamp and attaching to fixture socket a dangling cord,—unsightly, and usually in the way.

These illustrations show receptacles for house installations, the principal difference between the different types being in appearance and suitability for various rooms and locations in baseboard, floor, or wall. Your local dealer can supply any one or all of them, or, if not, we shall be glad to supply him, if you or he will write us.

There are many other important facts connected with the wiring and equipment of "The House Electrical" which are necessarily omitted from this book through lack of space; but these you can readily acquire by a visit to our establishment, or, if this is impossible, by a reading of other literature which a request will bring you. Thus our booklet "More Light" explains how you can get more light, or use more current for electrical appliances, without increasing your lighting bills materially; our bulletin "The New and Better Way" describes the new Indirect Illumination which has revolutionized lighting conditions, and so on.

We invite you to call on us, either personally or by letter, for any information that will help you to make your home "The House Electrical."



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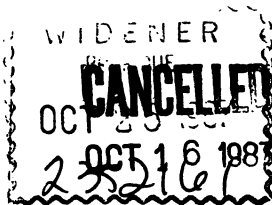
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